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ABSTRACT

School psychologists have considerable measurement expertise when compared to physicians, social workers, and other professionals delivering psychological services to schools and children. However, psychologists are far from qualified to portray themselves as measurement experts. It is important to know psychologists' boundaries of measurement competence for both ethical and professional development reasons. If psychologists can identify preservice and inservice training needs for developing measurement competence then they can become a repository of measurement expertise. Psychologists can become measurement experts which would put them in the position to deliver services that are indispensable to schools. Psychologists should consider merging measurement and consultation skills in order to deliver more measurement services through an indirect service delivery model. Psychologists' advanced behavioral science training allows them to answer important questions about a variety of measurement issues of interest to educational professionals and parents. Measurement consultation services must be highly visible and valued by many constituencies in order for them to become sought out by schools. Psychologists' challenge is to not spend an inordinate amount of time protecting existing services but, rather, they must innovate at a rate that ensures the value of the profession. (JBJ)

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Chapter Twenty-Six

Measurement Consultation

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This is a true/false test.

Item 1. Psychologists are measurement experts.

Item 2. Teachers and parents are seeking measurement services.

Item 3. Measurement consultation services are routinely advertised to schools by psychologists.

Item 1. Answer: False

The answer to the first item is clearly false, although this myth is often repeated among groups of psychologists. Perhaps the best way to make this point is to paraphrase Lloyd Bentsen by saying, I have worked with many fine measurement scientists and psychologists are typically not measurement scientists. In fact, most of the measurement scientists with which I have had the pleasure to work would not identify themselves as psychologists.

Most psychologists, and other assessment workers in schools, make the same measurement errors when choosing and interpreting tests for the purpose of learning disabilities diagnosis (Shepard, Smith, & Vojir, 1983). In fact, psychologists continue to make ill advised interpretations of tests relatively routinely (Matarazzo, 1990). Psychologists also select tests poorly by not carefully considering the psychometric and practical strengths and weaknesses of each measure under consideration (Kamphaus, 1993). The famed O. K. Buros lamented the lack of psychometric rigor that psychologists apply to the test selection process. Dr. Buros' pessimistic view of the test user (which includes the psychologist) is summarized in this 1961 quote from *Tests in Print.*

It is difficult to allocate the blame for the lack of greater progress. We think, however, that the major blame rests with test users. The better test publishers would like to make more moderate claims for their tests. Unfortunately, test buyers don't want tests which makeonly moderate claims. Consequently, even the best test publishers find themselves forced by competition to offer test users what they want. Bad usage of tests is probably more common than good usage. Must it always be this way? We are afraid so.

We should not, however, single ourselves out for self-recrimination as many of our fellow professionals also select and use instrumentation poorly.

I am also reminded during our annual admission process that many undergraduate psychology majors are no longer required to take

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a tests and measurement course. Moreover, it seems that the demands of practicum and internship make it increasingly difficult for our graduate students to take advanced statistics and measurement coursework. We need to take care not to ignore such a central aspect of psychological science because of complacency. Our colleagues in related professions have served to remind us that psychological assessment is a valuable service by attempting to adopt instrumentation such as the Minnesota Multiphasic Personality Inventory (MMPI) and the Wechsler scales for use by nonpsychologists. A positive outcome of these guild protection skirmishes is greater interest in enhancing the psychological assessment function of our profession.

Most psychologists are like our alumni in that they have taken several assessment courses such as intelligence and personality testing and behavioral assessment. These courses are frequently applied and offer little formal measurement science training. Similarly, graduate students usually take several statistics courses that cover topics such as univariate and multivariate statistics. These courses also offer little training in measurement science. An even smaller number of psychologists take a course in measurement theory which exposes the trainee to various measurement models and provides an overview of classical and modern test theories and specific methodologies such as factor analysis. Even fewer students take the courses necessary to become competent measurement experts. Such courses would include factor analysis, structural equation modeling, and item response theory.

Psychologists do have considerable measurement expertise when compared to physicians, social workers, and other professionals delivering psychological services to schools and children. We are, however, far from qualified to portray ourselves as measurement experts.

It is important for us to know our boundaries of measurement competence for both ethical and professional development reasons. If we can identify our preservice and inservice training needs for developing measurement competence then we can become a repository of measurement expertise. Nevertheless, we are far from being identified as measurement illiterate. We can, however, become the measurement elite which would put us in a position to deliver services that are indispensable to schools.

Item 2. Answer: True

The measurement expertise of psychologists has always been valued by American schools (French & Hale, 1990). Simultaneously, the measurement work of psychologists has also been the source of great controversy. Regardless of the periods of controversy, it is likely that the measurement expertise of psychologists will prove too valuable to eschew. I am proposing, however, that we create a new service that could make our measurement expertise truly indispensable. Specifically, I suggest that we consider merging our measurement and consultation skills in order to deliver more measurement services through an indirect service delivery model.

The terms measurement and consultation have been chosen carefully to represent a new and needed service to schools and other educational institutions. In the future, psychologists will be less likely to provide direct testing services. Routine assessment services can, for the most part, be provided by individuals who do not hold the doctoral degree (Cummings, 1995). Individuals with masters and specialist degrees in school psychology, psychometry, and related fields can competently administer, score, and interpret a variety of tests. Moreover, these testing services are typically offered by such professionals today.

Psychologists, on the other hand, can become equally indispensable to schools because they possess measurement knowledge and competencies that are currently not duplicated, or provided on a large scale basis, by other

professional groups. Put simply, we are the only readily available cadre of behavioral science professionals who take advanced coursework in measurement theory and measurement statistics. While other professionals take basic statistics and measurement courses, psychologists are often required to master multivariate statistical methods and the measurement theory that underlies the typical graduate level clinical assessment and tests and measurement coursework. Moreover, our advanced graduate school experience increases the likelihood that we can become involved in sophisticated measurement research. Finally, we often avail ourselves of coursework covering a variety of measurement models including single courses or course sequences dedicated to qualitative research methods.

This advanced behavioral science training allows the psychologist to answer important questions about a variety of measurement issues of interest to educational professionals and parents. Some measurement questions of interest include:

1. How do I interpret the scaled score offered for multilevel group administered achievement tests? I do not, for example, know how to interpret a score of 341.
2. Why are my child's mathematics achievement test scores getting lower with increasing age?
3. How do I assess the spelling skills of my class? I do not think that the tests that other teachers are using are appropriate for my class since I teach spelling differently.
4. What can I do at home to raise my child's score on the Scholastic Aptitude Test (SAT)?
5. We want to use measures other than IQ tests to assess children for enrichment classes. What measures can we use?
6. I completed an attention deficit hyperactivity disorder (ADHD) checklist in a parents magazine and it said that my child probably has ADHD, the teachers, however, tell me that he does not have ADHD. Who is correct?
7. Is there a medication that will help my daughter's test scores?
8. We are using portfolio assessments widely in our school. How do we ensure that they are not culturally biased as some parents fear?
9. My neighbor said that she thinks that my child did poorly on the achievement testing this year because of our divorce. Is that likely?
10. I get terribly nervous before tests and I am worried that I will not pass the high school competency test. What can I do?

These examples call upon many areas of psychological measurement science including latent trait scaling methods, item bias detection techniques, test development skills, knowledge of the effects of coaching, regression effects, behavioral influences on testing, and other concepts. In my view, the psychologist who can answer these questions will be perceived by stakeholders such as parents and teachers as indispensable. Moreover, it is readily apparent that the answer(s) to most of these questions do not require testing per se but, rather, consultation that is supported by measurement science.

Some of the desirable assessment and associated consultation services that may be offered routinely to educators and parents might include:

A parent information session at the beginning of each school year. This session could be used to inform parents of the various assessment procedures to be used during the upcoming year ranging from special education diagnostic services

to ongoing assessment of academic skills. Such a session could be invaluable for enlisting parental support for the completion of rating scales and other efforts that may require their assistance. This session could be followed by a couple of parent drop in sessions that are offered later in the year.

Assessment consultation services could be delivered via teacher information sessions. This session may serve as an open forum for teachers. This venue may also have a didactic component that explains phenomena such as the identification of giftedness and appropriate interpretation of derived scores based on latent trait theory and other methods.

Test development assistance may be welcomed at the classroom, building, or district levels. Psychologists could offer guidance and support for every step of test development ranging from test conceptualization to statistical studies of bias and validity.

A psychologist may offer screening systems design. Screening systems that benefit from measurement expertise include kindergarten readiness and mental health problem early identification programs.

Test selection services. School districts are highly interested in identifying methods and practices that are appropriate for implementing newly mandated selection criteria, and time and cost efficient testing practices.

Test anxiety and preparation reduction groups for children and adolescents. This service is direct rather than consultative, but it is an example of the application of measurement expertise to groups as opposed to the typical practice of individual testing.

Item 3. Answer: False

Psychologists currently offer these services in a haphazard fashion. They already provide services such as coordinating all aspects of the school district's group achievement testing program, developing a performance based assessment system for a large urban school district. coordinating a child find early screening program for preschoolers who are suspected of handicapping conditions, direction of a school districts special education assessment process, and program evaluation design for applications for external funding of special projects.

Perhaps these services would be more salient to our graduate students and schools if measurement consultation served as a recognized field of inquiry. At this point I am unaware of psychology training programs who offer a course that might be titled Applied Measurement Consultation. Such a course could offer training in clinical psychological and educational test development, screening assessment design, assessment for program evaluation, linking assessment questions with content areas of psychology such as development and psychopathology, and consultation with parents.

Currently, the overused term in political circles is grassroots organization. Although the term is overused, this concept does have implications for psychological services in schools. Our measurement consultation services must be highly visible and valued by many constituencies in order for them to become sought out by schools. The most successful measurement consultation services will be those that appeal not only to the school administration, but also to teachers, parents, and yes, children.

I propose five steps for the development of a highly valued measurement consultation service that will be viewed as requisite to successful schooling.

1. Obtain the necessary measurement training and/or develop a list of consultants that can be called upon as their expertise becomes necessary.
2. Prepare a menu of services to be offered and market these services to all of the constituencies at the school or school

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district level.

3. Emphasize services that impact as many constituencies as possible in order to increase the marketability of future services.
4. Systematically evaluate the effectiveness of each service which should also include collecting feedback from participants. Positive evaluations of this nature provide invaluable grassroots support for psychological services.
5. Develop new assessment consultation services based on continuing education that is accrued.

We should recognize that in many quarters psychological services are deemed indispensable by schools. Our challenge is to not spend an inordinate amount of time protecting existing services but, rather, we must innovate at a rate that ensures the value of our profession. Psychological services are not unlike the computer industry in that the most successful companiescreate new products at a dizzying pace. The changes in health care and schooling practices are now forcing us to innovate at an unparalleled pace. Fortunately, for our profession, school-related measurement issues have presented ample practice opportunities for psychologists for nearly a century now. These societal measurement needs will likely remain prescient although sometimes they will present themselves in new forms. Our challenge is to provide a framework for innovation that will ensure that we meet these emerging needs. The service category of measurement consultation is one such framework.

The influential nature of measurement ideas for psychological services is demonstrated in the following quote by Arthur Otis. Otis was a student of Lewis Terman's who created the first group administered intelligence test which served as the forerunner of all group testing in this century. The following excerpt is part of a response that Otis gave in a television interview in 1959.

> ...Well, when World War I began, Major Yerkes, a psychologist at Yale University, conceived the idea that it would be very desirable to test the intelligence of the draftees as soon as they came into the Army so that the superior officers could pick out officer material and could place the men in the various functions of the Army to the best advantage. So he invited some other psychologists, Drs. Whipple, Terman, and Haggerty, to form with him a committee to consider the possibility of doing this testing. It was Major Yerkes' idea at the time that they would have to train a lot of psychologists to give the Binet. He didn't know anything about any group tests....So, fortunately perhaps, Dr. Terman presumably had a copy of my test in his pocket with him at the time. You see this incident occurred, this incident of World War I—just at the time that I was finishing my doctor's degree, and I had this manuscript of the test and it was pretty well standardized. Dr. Terman had been convinced that it was fairly sound and workable, and so he probably told him that they needn't bother with giving the Binet to everybody because there's a young fellow out at the University in my class who has made up a group test...

Hence, group testing in the schools became an indispensable component of American schooling. Hopefully, a measurement consultation framework for organizing some of our assessment services will lead to the development of equally valued services for the future. May we all be as insightful as Yerkes.

References

Buros, O. K. (1961). *Tests in print: A comprehensive bibliography of tests for use in education, psychology and industry.* Highland Park, NJ: Gryphon Press

Cummings, N. A. (1995). Impact of managed care on employment and training: A primer for survival. *Professional Psychology: Research and Practice, 26,* 10-15.

French, J. L., & Hale, R. L. (1990). A history of the development of psychological and educational testing. In C. R. Reynolds and R. W. Kamphaus (Eds.), *Handbook of Psychological and Educational Assessment of Children* (pp. 3-28). New York: Guilford.

Kamphaus, R. W. (1993). *Clinical assessment of children's intelligence.* Needham Heights, MA: Allyn & Bacon.

Matarazzo, J. D. (1990). Psychological assessment versus psychological testing? Validation from Binet to the school, clinic, and courtroom. *American Psychologist, 45,* 999-1017.

Shepard, L. A., Smith, M.L., & Vojir, C.P. (1983). Characteristics of pupils identified as learning disabled. *American Educational Research Journal, 20,* 309-331.